# Blue Grass COCOLONIA A Partnership for Safe Chemical Weapons Destruction

#### Winter 2006



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Blue Grass Chemical Agent-Destruction Pilot Plant

Blue Grass Chemical Stockpile Outreach Office

301 Highland Park Drive Richmond, KY 40475 (859) 626-8944 bgoutreach@bah.com Hours 8:30 a.m.–5 p.m., M–F Other hours by appointment

Blue Grass Chemical Activity Public Affairs

(859) 779-6897

Blue Grass Army Depot Public Affairs (859) 779-6221

Bechtel Parsons Blue Grass Public Outreach (859) 625-1291



www.pmacwa.army.mil

# New Year Begins With New Project Manager at the Helm



#### Message From the Managers

#### **Project in Good Hands for the New Year**

By JIM FRITSCHE Blue Grass Chemical Agent-Destruction Pilot Plant Site Project Manager

And CHRIS HAYNES Bechtel Parsons Blue Grass Project Manager

Did you notice the new manager's byline? As Chris Midgett moves to a new position in Bechtel corporate management in Frederick, Md., Chris Haynes has taken the reins as project manager for Bechtel Parsons Blue Grass. We congratulate Chris Midgett on his promotion and look forward to the fresh ideas and expertise that Chris Haynes brings to the project.

In addition to Chris, we are excited to introduce Ralph Collins and Art Stover to you. Ralph is the new deputy site project manager for the Blue Grass Chemical Agent-Destruction Pilot Plant, and Art is now the design-build manager for Bechtel Parsons Blue Grass.

We also welcome the new team members in the Chemical Stockpile Outreach Office. Yvonne Riding, community outreach manager, and Stephanie Parrett, community outreach specialist, will share information about the plant and involve the community on behalf of the Program Manager Assembled Chemical Weapons Alternatives.

#### **Other News**

- While continuing work on the intermediate design of the facility, Bechtel Parsons
  Blue Grass is preparing a life cycle cost
  estimate for the government that will
  include estimates for facility construction,
  testing, operations and closure a major
  collaborative effort over the next several
  months.
- Preliminary site work began recently when the Corps of Engineers and its subcontractor began cutting harvestable trees on the Blue Grass Army Depot. Depending on funding, this will lead to early construction on an access road into the pilot plant site and a new depot access control facility early this year.
- The project is considering separating the rocket motors from the M55 rockets and is pursuing several potential treatment options. We will seek input on the decision-making process from the Secondary Waste Working Group, a subcommittee formed by the Chemical Destruction Community Advisory Board and the Kentucky Chemical Demilitarization Citizens' Advisory Commission. Recommendations from the working group will be sent to the entire board for review. And the government will weigh this input heavily as important technical decisions are made.
- We are proud of the project's safety record and are looking forward to meeting our one millionth hour of work with no lost time accidents.

As we begin 2006, we encourage you to read this issue of Blue Grass *Exchange* to learn more about the project and our new staff. Your involvement is key to our continued progress.

#### Who's New at the Outreach Office



Outreach team members are on hand to help you obtain information on all aspects of the safe storage and disposal of the chemical weapons stockpile. Community Outreach Manager Yvonne Riding and Community Outreach Specialist Stephanie Parrett joined the Blue Grass Chemical Stockpile Outreach Office in November.

The outreach office provides the community with a one-stop information source about Kentucky's chemical weapons destruction project. The office is currently located at 301 Highland Park Drive and will be moving to 1000 Gibson Bay Drive, Suite 2, in Richmond, Ky.

Contact the outreach team at (859) 626-8944 or bgoutreach@bah.com.

Pictured from left to right are Yvonne Riding, community outreach manager; Mickey Morales, Bechtel Parsons Blue Grass public involvement manager; and Stephanie Parrett, community outreach specialist.

#### New Project Manager at Bechtel Parsons Has 'Bias for Action'

Chris Haynes, the new project manager for Bechtel Parsons Blue Grass, knows his team well. He's served as design-build manager since June 2003, heading up the design team that is taking the Blue Grass Chemical Agent-Destruction Pilot Plant from concept to reality.

His past two years with the design team have convinced Haynes that all the right people are on board. "We have people working on the project who bring experience from all the past and present chemical demilitarization sites. To have all that now provides the experience and knowledge for a very good plan."

Haynes said he expected the team to be able to transition into the construction, testing, operation and closure phases without missing a beat. "We are already thinking



Chris Haynes, Bechtel Parsons Blue Grass project manager, discusses design components with Craig Williams, Chemical Weapons Working Group chair.

ahead about specific safety procedures during operations, where we place the locks, how we do maintenance – and as many routine and non-routine operations that we know will occur in the plant." The new project manager, a civil engineer with 27 years' experience with Bechtel, describes himself as having a "bias for action." He said he is looking forward to buying a house and moving his wife and three sons to Kentucky.

Haynes is a registered professional engineer in Kentucky. Prior to his Blue Grass assignment, Haynes was the Bechtel National construction manager for the defense and space market sectors. Before that, he worked on the design and construction of petroleum and chemical plants, power plants and mining facilities. He has designed and constructed first-of-its-kind facilities for both government and commercial projects.

#### **Pilot Plant Team Welcomes Deputy Site Project Manager**



Ralph Collins, right, speaks to Ken Liberty, an environmental engineer for the BGCAPP project, at the recent Chemical Destruction Community Advisory Board meeting.

Ralph Collins, a certified hazardous materials manager with over 36 years' experience in the public and private sectors, joined the Blue Grass Chemical Agent-Destruction Pilot Plant team in November as the new deputy site project manager. "I'm thrilled to be involved in this extremely important program," he said.

Collins, who said he is committed to the overall goal of safely and efficiently destroying the stockpile of chemical weapons, will help manage the plant's field office and oversee the systems contract with Bechtel Parsons Blue Grass.

Collins is no stranger to the chemical stockpile destruction program or the military. He served over 26 years of active duty in the U.S. Navy in a variety of assignments involving petroleum management, facility operations and maintenance, government procurement and general logistics.

Following his military service, he was appointed deputy commissioner for the Kentucky Department for Environmental Protection. He represented the Commonwealth of Kentucky on the Assembled Chemical Weapons Assessment

Dialogue. He was also the state chair for the Kentucky Environmental Working Integrated Process Team.

Collins holds a bachelor's degree in metallurgical engineering from Ohio State University, an MBA from the University of Kansas and a master's degree in national security and strategic studies from the Naval War College.

"Ralph is a perfect fit for assisting me in leading the Blue Grass Project," said Site Project Manager Jim Fritsche. "With his extensive background in the Blue Grass chemical weapons destruction program and his knowledge of the Blue Grass Army Depot, the community and state and federal regulations, he will be a true asset to the team."

#### Permit Modification

Blue Grass Army Depot and Bechtel Parsons Blue Grass Joint Venture (BPBG) submitted Modification #1 to the Research Development and Demonstration Permit to the Kentucky Department for Environmental Protection (KDEP) on November 10, 2005.

This permit modification was to notify KDEP that Christopher S. Haynes was succeeding J. Christopher Midgett as the BPBG Project Manager, effective November 8, 2005.

This notification to the facility mailing list is being made in accordance with the requirements of 401 KAR 38: 040 Section 3 (1) (b).

During the course of the life of the facility, there will be numerous public notifications for permit modifications as required by law. If you are not on the official facility mailing list and are interested in receiving the permit modification mailings, please contact Mickey Morales, Bechtel Parsons Blue Grass public involvement manager, at (859) 625-1665 or outreach@bechtel.com.



# **Project Permits Signal Green Light for Construction**

Initial construction of the Blue Grass Chemical Agent-Destruction Pilot Plant reached a major milestone recently with the issuance of two key permits. The Resource Conservation and Recovery Act (RCRA) and Clean Air Act permits were granted by the Kentucky Department for Environmental Protection (KDEP).

Permits are required by state and federal law to ensure the facility is compliant with all regulatory requirements. The pilot plant is

subject to federal and state environmental laws and must obtain a permit before construction can begin. The permitting agency – which has the authority to issue or deny permits – will

monitor the facility to ensure it complies with the conditions in the permit.

One of the permits granted was the Research, Development and Demonstration (RD&D) permit, under the RCRA program. The permit allows for construction, testing and operation of the facility to destroy M55 rockets and 8-inch projectiles containing nerve agent GB, also known as sarin, and related wastes.

RCRA, implemented by the U.S. Environmental Protection Agency (EPA) and KDEP, regulates the management of hazardous waste from the moment it is generated until final disposition. The EPA has given the state environmental department the authority to implement RCRA under the Kentucky Hazardous Waste Regulations that parallel the federal RCRA regulation.

#### **Constant Communication**

Early in the permitting process, state regulators were in constant communication with all the affected organizations.

"We had several meetings and exchanged correspondence with Blue Grass Army Depot and Bechtel Parsons Blue Grass," said John Jump, depot project manager for KDEP's Division of Waste Management. "We attended [citizen group] meetings and participated in working groups. The agency also held a public hearing and sought public comment concerning those permits.

"In this case of the [chemical weapons storage and destruction] permits, it was a

> challenge to review and evaluate the associated hazardous waste applications and issue two permits in a timely manner so as not to hold up construction," said Jump.

"Open and honest dialogue between all stakeholders has been and will continue to be encouraged."

Jon Ware

The Bechtel Parsons Blue Grass
Environmental Team had overall
responsibility for obtaining the
required permits to allow for the start
of construction of the pilot plant.
Departments within Bechtel Parsons Blue
Grass, as well as government collaborators,
Program Manager Assembled Chemical
Weapons Alternatives (PMACWA), the
depot, the Blue Grass Chemical Activity,
Army Corps of Engineers and FOCIS
Associates/SAIC, provided valuable
input to the draft air and RD&D permit
applications.

"We met routinely with our government collaborators to discuss their comments and to review the proposed changes that we had made to address their comments," said Tom Kurkjy, environmental manager for the Bechtel Parsons Blue Grass team. "This process helped to expedite the submittal of the RD&D permit and air permit applications to KDEP for their review."

#### **Community Effort**

As key issues were identified, public stakeholders provided comments through the Kentucky Chemical Destruction Community Advisory Board.

"The issuance of these permits required the support of all of the organizations involved." said Kurkjy. "This has been truly a community effort to make these permits a reality."

Col. Rick Mason, the depot commander, is responsible for ensuring environmental regulations and laws are followed for operations occurring on the depot and is a signatory to the permit. All elements related to the permit – including correspondence, applications and modifications – are coordinated with the depot environmental office.

Col. Mason emphasized the depot's mission while expressing his appreciation to the commonwealth of Kentucky for granting the permits for chemical weapons storage and destruction operations.

"The Blue Grass Army Depot has safely stored its stockpile of chemical weapons for more than 60 years," Mason said. "I commend KDEP for the way they've balanced their oversight responsibilities with support for the mission to safely store and destroy the chemical weapons stored here."

To receive a RCRA permit, the depot, PMACWA and Bechtel Parsons Blue Grass submitted a detailed permit application describing how the pilot plant will be built and operated to comply with RCRA regulations.

#### **Open Dialogue**

"Open and honest dialogue between all stakeholders has been and will continue to be encouraged in order to discuss and resolve questions and concerns, as well as communicate expectations," said Jon Ware, PMACWA environmental officer. "PMACWA supports the permitting process by providing technical support during the review of environmental documents."

From its offices on the banks of the Chesapeake Bay, PMACWA worked hard to encourage collaboration. "Maintaining a team-orientated environment between PMACWA and the site office and not falling into the 'us/them' trap was one of the challenges," said Ware. "PMACWA and the site offices provide superior work products when working together."

Quickly following the receipt of the RD&D permit, the proposed air quality permit was issued by the KDEP's Division for Air Quality.

"Air quality permits protect human health and the environment by limiting the emissions of the permitted source," said Brian Ballard of KDEP's Division of Air Quality.

Issuance of the permits is just one of many steps. There will be oversight and compliance throughout the life of the project all the way through closure.

"The project team will be providing the required documents to KDEP as outlined in the RD&D permit's compliance schedule," said Kurkiy. "In addition, modifications to both the RD&D and the air permits will be required to address the changes that have occurred as a result of the implementation of the design considerations into the design of the BGCAPP. These modifications will be submitted to KDEP in late 2006 or early 2007."

Throughout the entire process, project staff will continue to keep all stakeholders informed and involved in the process.

To obtain a copy of the permits, contact the Blue Grass Chemical Stockpile Outreach Office at (859) 626-8944 or visit any of the public information repositories.

#### Information Repositories

Collections of information regarding environmental permitting of the Blue Grass Chemical Agent-Destruction Pilot Plant project are available at various community locations.

- Blue Grass Chemical Stockpile Outreach Office
   301 Highland Park Drive Richmond, KY 40475
- Eastern Kentucky University, Crabbe Library, government documents section
   Lancaster Avenue
   Richmond, KY 40475
- Kentucky Department for Environmental Protection Division of Waste Management 14 Reilly Road Frankfort, KY 40601
- Kentucky Department for Environmental Protection Division of Air Quality 803 Schenkel Lane Frankfort, KY 40601
- Madison County Public Library, Richmond Branch
   507 West Main Street Richmond, KY 40475
- Madison County Public Library, Berea Branch
   319 Chestnut Street
   Berea, KY 40403



Photo by Exchange

#### **Trees Cleared in Preparation for Construction**



The clearing contractor, Bob Ray Company, uses a grinding machine with an articulated arm to convert small trees, branches and leaves into mulch. Under contract to the Louisville District of the Army Corps of Engineers, the contractor will be clearing from Kentucky State Highway 52 to the future site of the Blue Grass Chemical Agent-Destruction Pilot Plant facility located on the Blue Grass Army Depot. A separate contractor will be harvesting tress and taking them to a lumber yard in southern Kentucky. The logs will be used for plywood and construction materials with proceeds from the sale going to the Blue Grass Army Depot.

#### **Chemical Destruction Board Meeting Focuses on Redesign Efforts**



Craig Williams, Chemical Weapons Working Group chair; Jim Fritsche, site project manager; and Dave Easter, Blue Grass Army Depot public affairs officer, along with members of the public, review the Chemical Destruction Community Advisory Board agenda Dec. 6 at the board's quarterly meeting. The board, a diverse group of local leaders, will meet next on March 15.



Jeanne Hibberd, Berea civic representative, introduces a proposed working group on community development impact.



Jim Fritsche, site project manager, introduces new team members and provides a Blue Grass Chemical-Agent Destruction Pilot Plant update.



Bill Gekler of the National Research Council addresses findings from the council's most recent report, "Interim Design Assessment for the Blue Grass Chemical Agent-Destruction Pilot Plant."

### Citizen Exchange

Citizen Exchange focuses on questions frequently asked by members of the community. If you have a question you would like to have answered in this section, please send it to Editor, Blue Grass Exchange, ATTN: Blue Grass Chemical Stockpile Outreach Office, 301 Highland Park Drive, Richmond, KY 40475. You may also send questions via e-mail to bgoutreach@bah.com.

#### Question: The National Research Council released a report on the pilot plant facility. What were the findings? And what is the response from the Program Manager Assembled Chemical Weapons Alternatives?

Answer: The National Research Council (NRC) concluded in a report issued Nov. 14 that "the design of a pilot plant that will destroy chemical weapons at the Blue Grass Army Depot...includes all the steps required for safe and effective destruction of the weapons, but these steps have yet to be integrated and tested." The Program Manager Assembled Chemical Weapons Alternatives (PMACWA) is reviewing the report. PMACWA believes the safety of the facility was clearly demonstrated early on in the project through research, development and demonstration phases. The technology and technical approach have been endorsed by the NRC in previous reports. Those elements with high safety risks have been eliminated from the design, and the fundamental approach to destroying the weapons is safe and environmentally adequate. As preparations for the pilot plant continue and proven processes are integrated into a full-scale facility, challenges and engineering issues will surface. Before any chemical weapons are introduced into the facility, training and testing will take place for several years. PMACWA, Bechtel Parsons Blue Grass, the depot and the Kentucky Department for Environmental Protection will review the data to verify that the facility is safe before chemical weapons are brought in for destruction.

#### Question: What design considerations are being studied?

**Answer:** The government and systems contractor team are still investigating additional design alternatives that may reduce the overall life cycle cost of the facility. The communities, through elected officials, the Kentucky Chemical Destruction Community Advisory Board and the governor-appointed Kentucky Chemical Demilitarization Citizens' Advisory Commission, have been involved in the decision-making process.

The project put together seven design consideration study teams to evaluate these additional potential design alternatives. One of the teams is looking at reconfiguring the mustard projectiles by removing the energetics before treatment in the facility. The team is examining the physical removal of the burster and fuze well cup from the projectile. This material can then be processed at a separate facility from the agent-containing projectile. This operation can be performed manually under engineering controls using well-developed technology and trained personnel. The team is also investigating alternative destruction methods including the Explosives Destruction System, Controlled Detonation Chamber and a Static Detonation Chamber that is currently undergoing testing in Germany.

#### Question: What is the status of the environmental analysis for the access road to the Blue Grass Chemical Agent-Destruction Pilot Plant?

**Answer:** The Blue Grass Army Depot conducted an environmental assessment for the siting of the BGCAPP facility and associated access road, parking areas and utilities which resulted in a Finding of No Significant Impact. After reviewing the assessment and other project information, BGAD Commander Col. Rick Mason concluded that "the effects of the proposed action are not significant and will not adversely affect the quality of the environment. BGAD will implement necessary mitigation measures and will consult with regulatory agencies as may be necessary to ensure compliance with all federal, state and local regulations." A copy of the document is available at the Blue Grass Chemical Stockpile Outreach Office.

## Question: What is the status of the study being conducted to look at shipping the byproducts of chemical weapons neutralization to an off-site facility out of state? Will the facility still be using supercritical water oxidation as a post treatment technology?

**Answer:** The basis for executing this design consideration study was the potential for reducing the life cycle costs associated with the BGCAPP facility by shipping neutralization hydrolysates off-site for treatment at commercial facilities thus eliminating the need for on-site supercritical water oxidation processing. Various options offering potential cost reduction opportunities are continuing to be studied, but no decisions have been made regarding the shipment and treatment of chemical agent hydrolysate off-site. In the meantime, the systems contractor is continuing to design the on-site supercritical water oxidation treatment facility.

#### **State Environmental Department Grants Two Key Permits**



The Kentucky Department for Environmental Protection, Division of Waste Management's Blue Grass Army Depot project team consists of Bill Buchanan, inspector; Shannon Powers, project coordinator; John Jump, team leader; and Eric Ringo, engineer. Not pictured: Tim Barrett, geologist.

#### **Turn to Page 4 for complete** story on environmental permitting.

#### **KY Division of Waste Management**

14 Reilly Road Frankfort, KY 40601 Phone: (502) 564-6716 Fax: (502) 564-2705 E-mail: waste@ky.gov

#### **KY Division for Air Quality**

Candy Montgomery 803 Schenkel Lane Frankfort, KY 40601 Phone: (502) 573-3382 Fax: (502) 573-3787

E-mail: candy.montgomery@ky.gov

Richmond, KY 40475 301 Highland Park Drive Blue Grass Chemical Stockpile Outreach Office

> Destruction Pilot Plant Blue Grass Chemical Agent-

